

(11) Publication number:

09140679 A

Generated Document.

PATENT ABSTRACTS OF JAPAN

(21) Application number: **07307353**

(51) Intl. Cl.: A61B 5/022

(22) Application date: **27.11.95**

(30) Priority:

(43) Date of application

publication:

03.06.97

(84) Designated contracting

states:

(71) Applicant: NIPPON COLIN CO LTD

(72) Inventor: OGURA TOSHIHIKO
OKA SUSUMU

IGAWA TOMOKO

(74) Representative:

(54) AUTOMATIC SPHYGMOMANOMETER WITH MEASURING FUNCTION OF PULSE WAVE PROPAGATION VELOCITY

(57) Abstract:

PROBLEM TO BE SOLVED: To improve the accuracy on measurement or purse wave propagation velocity as possible in an automatic sphygmomanometer with a measuring function of pulse wave propagation velocity for determining a blood pressure of an organism based on heart beat synchronized signal generated from the organism in process for varying the pressure of a cuff wound on part of the organism.

SOLUTION: After induced wave forms of an organism is detected by an electrocardiograph apparatus 70 through electrodes attached to the organism and cuff wave forms of the organism are detected by a pressure sensor 40, a time difference TDRP till

the down peak point of the pulse wave from R wave of the induced wave forms is determined by a time difference calculating means 82 and a propagation velocity VMI of cuff pulse wave is calculated by a propagation velocity calculating means 84 based on the time difference TDRP. Then, since the variation in the propagation velocity VM1 is judged to be lower than a given value by a variation decision means 86, a mean value of three pulses of the propagation velocity VM1 of cuff pulse wavesuscesively calculated, is decided to be a propagation velocity VM2 of the pulse wave propagating in artery of the organism by a propagation speed decision means 87.

COPYRIGHT: (C)1997,JPO

